

Appl. No. 10/623,240  
Amdt. dated January 4, 2006  
Reply to Office Action of 11/02/2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

What is claimed is:

1. (currently amended) A method of traffic measurement collection in a telecommunication network of interconnected nodes arranged to provide connection between network resources, said method comprising:

comparing a message unit rate on at least one of a plurality of a monitored communication linksets at a network node to a predetermined overload threshold, wherein the predetermined overload threshold can be separate for each of said plurality of monitored communication linksets—;

if said unit rate exceeds said overload threshold, identifying communication linksets which provide traffic to said monitored communication linkset; and

for each of said identified communication linksets, incrementing a count element for each message unit received on respective identified communication linksets.

2. (currently amended) The method of Claim 1 further comprising comparing said message unit rate on said at least one of a plurality of monitored communication linksets to a predetermined underload threshold and terminating traffic measurement collection if said underload threshold exceeds said message unit rate.

Appl. No. 10/623,240  
Amdt. dated January 4, 2006  
Reply to Office Action of 11/02/2005

3. (original) The method of Claim 2 further comprising providing an indicator upon terminating of traffic measurement collection.

4. (original) The method of Claim 1 further comprising providing an indicator upon commencement of traffic measurement collection.

5. (original) The method of Claim 1 further comprising providing a traffic measurement report including said incremented count element for said respective identified communication linksets.

6. (original) The method of Claim 1 wherein said network node is a signaling transfer point.

7. (original) The method of Claim 1 further comprising limiting traffic measurement collection to a predetermined maximum period.

8. (currently amended) A method for traffic measurement collection in a telecommunication network of interconnected nodes, said method comprising:

comparing a message unit rate on each of a first set of monitored communication linksets at a network node to a respective predetermined overload threshold, wherein the predetermined overload threshold can be separate for each of said first set of monitored communication linksets;

if said message unit rate on one of said monitored communication linksets exceeds said overload threshold, identifying communication linksets which are providing traffic to said one monitored communication linkset; and

Appl. No. 10/623,240  
Amtd. dated January 4, 2006  
Reply to Office Action of 11/02/2005

for each of said identified communication linksets, incrementing a count element for each message unit received on respective identified communication linksets.

9. (currently amended) The method of Claim 8 further comprising selecting a second set of monitored communication linksets at said network node for traffic measurement collection, comprising:

for each of said second set of monitored communication linksets, examining outgoing message units for determining communication linksets associated with said outgoing message units; and

for each of said determined communication linksets, incrementing a count element for each message unit received on respective determined communication linksets, wherein the predetermined overload threshold can be separate for said first set of monitored communication linksets and for said second set of monitored communication linksets.

10. (original) The method of Claim 8 further comprising comparing said message unit rate on one of said second set of monitored communication linksets to a predetermined underload threshold and terminating traffic measurement collection for said one monitored communication linkset if said underload threshold exceeds said message unit rate of said one outgoing linkset.

11. (original) The method of Claim 8 further providing a traffic measurement report including said incremented count element for each of said respective identified communication linksets.

Appl. No. 10/623,240  
Amdt. dated January 4, 2006  
Reply to Office Action of 11/02/2005

12. (original) The method of Claim 8 wherein said network node is a signaling transfer point.

13. (currently amended) An apparatus for traffic measurement collection in a telecommunication network of interconnected nodes, said apparatus comprising:

a monitor having an input for receiving message units for transmission on at least one of a plurality of monitored communication linksets of a network node and operable to determine a message unit rate for each of said monitored communication linksets, said monitor operable for comparing said message unit rate to a predetermined overload threshold, wherein said predetermined overload threshold can be separate for each of said monitored communication linksets, said monitor further having an output for transmitting a first indicator for commencing said traffic measurement collection upon detecting that said message unit rate exceeds said overload threshold;

an examiner having an input coupled to said monitor for receiving said first indicator, said examiner responsive to said first indicator for identifying communication linksets which provide traffic to said monitored communication linkset;  
and

a counter coupled to said examiner for receiving therefrom information indicative of said identified communication linksets, said counter operable, for each respective identified communication linkset, to increment a count element for each message unit received.

Appl. No. 10/623,240  
Amdt. dated January 4, 2006  
Reply to Office Action of 11/02/2005

14. (original) The apparatus of Claim 13, wherein said monitor is further operable to compare said message unit rate to a predetermined underload threshold and transmit a second indicator for terminating said traffic measurement collection upon detecting that said underload threshold exceeds said message unit rate.

15. (original) The apparatus of Claim 13, wherein said network node is a signaling transfer point.

16. (original) The apparatus of Claim 13, wherein said network node comprises a plurality of monitored communication linkset.

17. (original) The apparatus of Claim 13, wherein said examiner includes an input for permitting a user to direct said examiner to identify a communication linkset for traffic measurement collection for any message unit rate.

18. (currently amended) A telecommunication network with traffic measurement collection capability comprising:

a plurality of interconnected network nodes, at least one of said network nodes having a plurality of communication linksets coupled to other network nodes; and

a traffic measurement device coupled to said one network node, said traffic measurement device comprising:

a monitor having an input for receiving message units for transmission on said plurality of communication linksets and operable to determine a message unit

Appl. No. 10/623,240  
Amdt. dated January 4, 2006  
Reply to Office Action of 11/02/2005

rate for at least one of said communication linksets, said monitor operable for comparing said message unit rate to a predetermined overload threshold, wherein a separate predetermined overload threshold can be assigned to each of said communication linksets coupled to said plurality of interconnected network nodes, and wherein a separate predetermined overload threshold can be assigned to each of said communication linksets coupled to said other network nodes, said monitor further having an output for transmitting a first indicator for commencing said traffic measurement collection upon detecting that said message unit rate exceeds said overload threshold;

an examiner having an input coupled to said monitor for receiving said first indicator, said examiner responsive to said first indicator for identifying incoming communication linksets which provide traffic to said at least one communication linkset; and

a counter coupled to said examiner for receiving therefrom information indicative of said identified communication linksets, said counter operable, for each of said identified communication linksets, to increment a count element for each message unit received.

19. (original) The telecommunication network of Claim 18, wherein said one network node is a signaling transfer point.

20. (original) The telecommunication network of Claim 18, wherein said examiner includes an input for permitting a user to direct said examiner to identify a communication linkset for traffic measurement collection for any message unit rate.